Gulf of Mexico Harmful Algal Bloom Bulletin

10 October 2006

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: October 5, 2006

Conditions Report

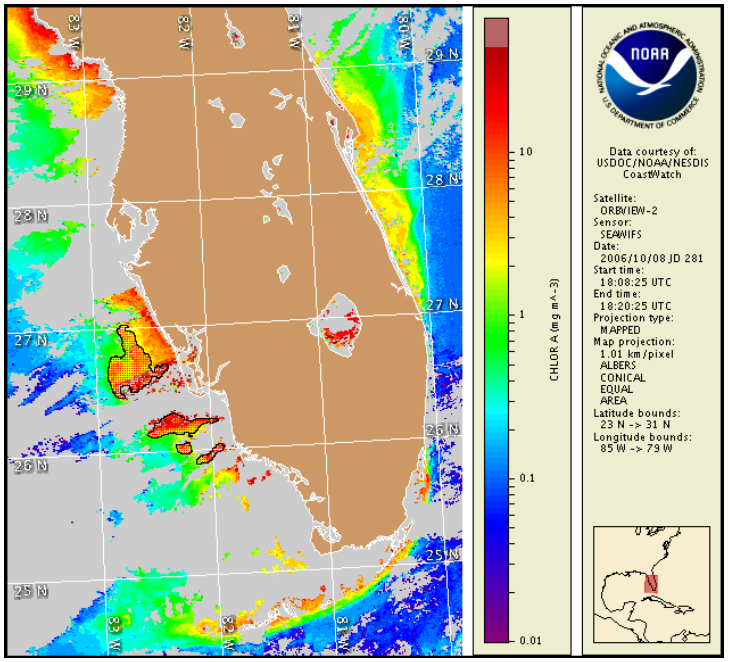
A harmful algal bloom has been identified onshore from Pinellas to central Collier County. Patchy very low impacts are possible today from southern Pinellas to central Collier County; with patchy low impacts possible in southern Charlotte County. An increased potential for impacts is possible this afternoon. On Wednesday and Thursday patchy moderate impacts are possible from Manatee to central Collier County, patchy high impacts are possible in southern Charlotte County, patchy low impacts are possible in southern Pinellas County, and patchy very low impacts are possible in northern Pinellas County.

Analysis

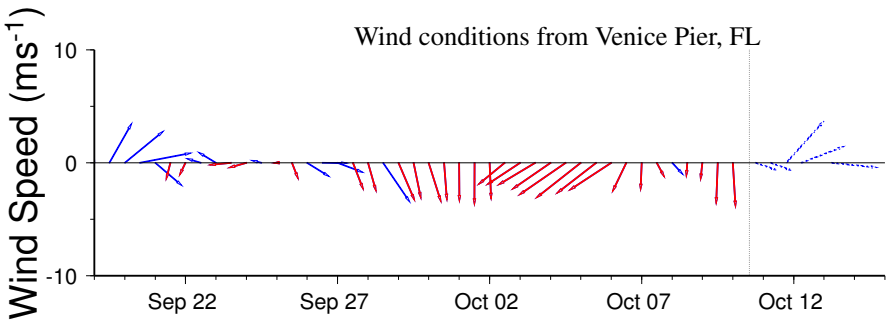
A harmful algal bloom persisting onshore from Pinellas to Collier County has expanded further south into offshore portions of northern Monroe County. While very low concentrations of *K. brevis* have been newly identified up to 46 miles offshore northern Monroe County (FWRI, 10/5), concentrations of *K. brevis* continue to increase in the southern portions of the bloom region. Medium to high concentrations are present in patches alongshore and offshore SW Florida from southern Pinellas to central Collier County. In addition, low to medium concentrations of *K. brevis* were identified both at the surface and at depth last week up to 15nm offshore Bunces Pass in Pinellas County; and very low concentrations were confirmed onshore as far north as Clearwater Pier (FWRI, 10/4-5). While regions of high chlorophyll along southwest Florida continue to appear more patchy, high chlorophyll levels are visible offshore Pinellas County at 27°55.6'N 82°54.5'W (up to up 18μg/L), offshore Lee County from Gasparilla Sound (26°45.2'N 82°19.5'W) to Redfish Pass (26°33.8'N) (up to 30μg/L), just offshore northern Sarasota County at 27°21.6'N 82°40.2'W, and in the far southern extent of the bloom at 25°46.4'N 81°35.4'W (as high as 40μg/L). These coordinates are based on satellite imagery taken on 10/9; due to technical issues the image shown was taken on 10/8.

Portions of the bloom have likely intensified over the weekend due to upwelling favorable conditions. Onshore winds on Wednesday and Thursday will increase the potential for impacts at the coast. Further southerly expansion and intensification is possible.

˜Fisher, Urizar

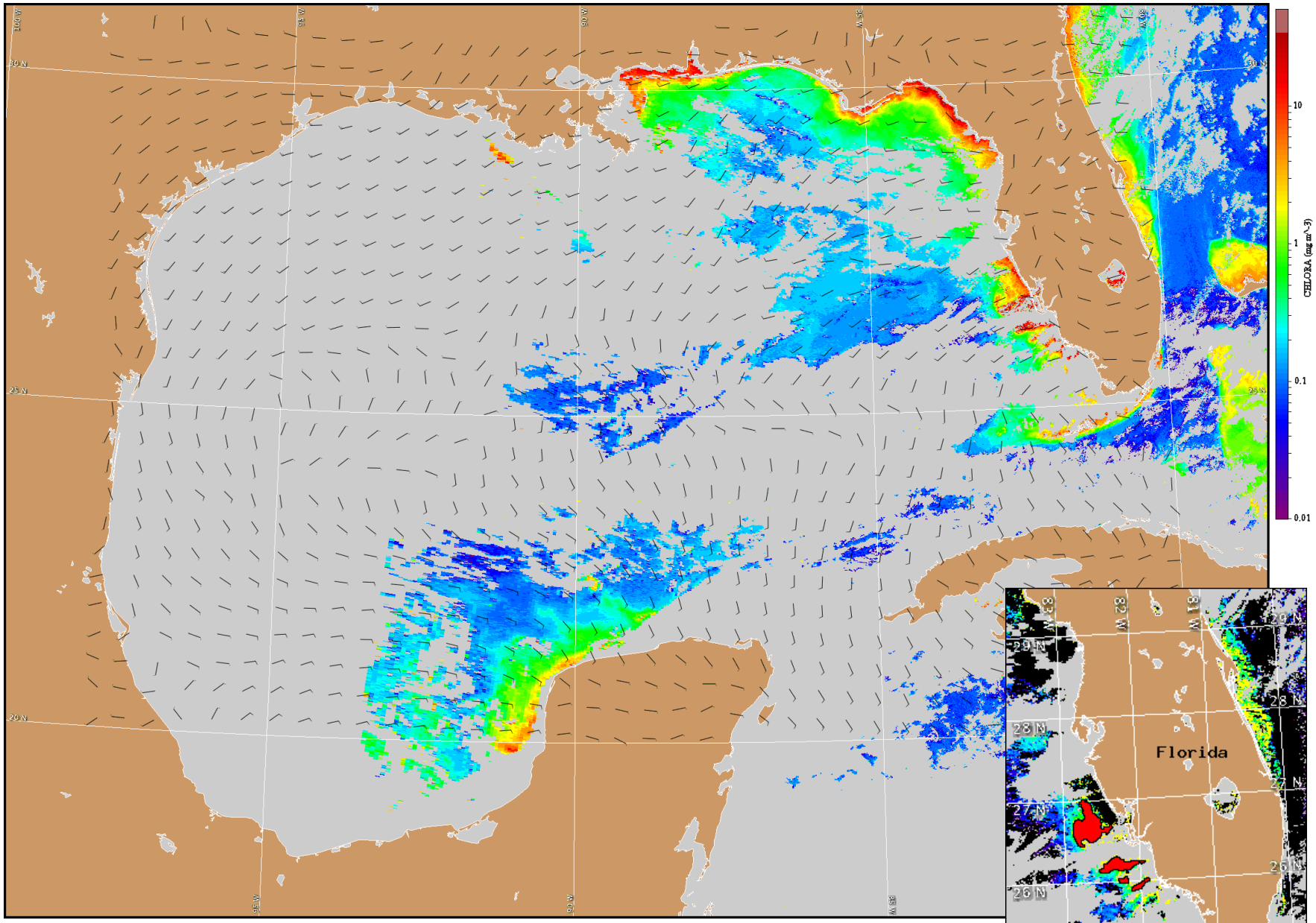


Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration categories and corresponding cell count values from Florida Fish and Wildlife Research Institute. For a key to the cell concentration descriptions, visit http://research.myfwc.com.

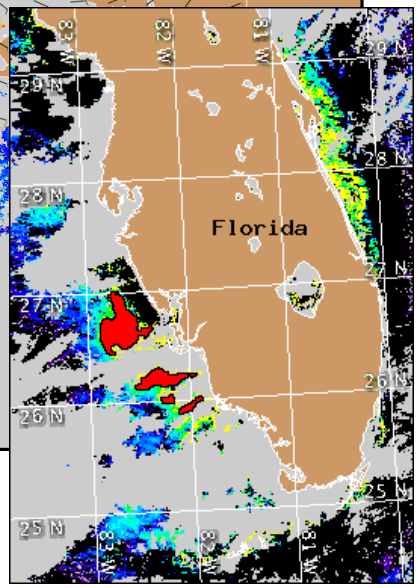


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Milder (5-10kts, 3-5m/s) northerlies today will shift northwesterly this afternoon. Westerly winds (10kts, 5m/s) forecasted for Wednesday are expected to strengthen (10-15 kts, 5-8m/s) and continue through Thursday.

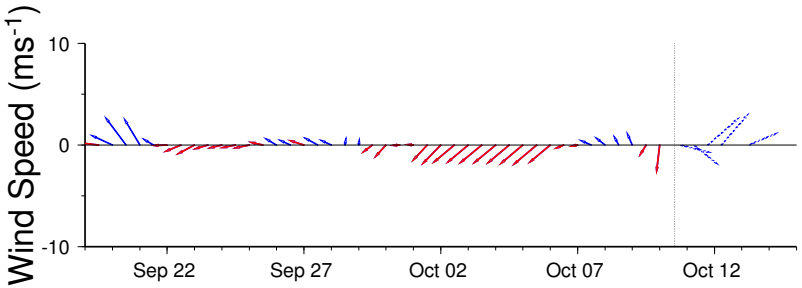


Satellite chlorophyll image and forecast winds for October 11, 2006 12Z.



Verifi ed HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Naples, FL



Wind conditions from Clearwater Beach, FL